

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

AMERICAN PILEDIVING EQUIPMENT,  
INC.,

Plaintiff,

v.

BAY MACHINERY CORPORATION,

Defendant.

No. C 08-1934 PJH

**ORDER GRANTING SUMMARY  
JUDGMENT IN PART AND DENYING  
SUMMARY JUDGMENT IN PART**

The parties' cross-motions for summary judgment came on for hearing on December 9, 2009 before this court. Plaintiff American Pilediving Equipment, Inc. ("plaintiff" or "APE"), appeared through its counsel, Craig J. Madson, and Andrew S. Azarmi. Defendant Bay Machinery Corporation ("defendant" or "Bay") appeared through its counsel, Peter C. Knops. Having read all the papers submitted and carefully considered the relevant legal authority, the court hereby GRANTS the motions for summary judgment in part and DENIES the motions for summary judgment in part, for the reasons stated at the hearing, and as follows.

**BACKGROUND**

Plaintiff APE is the owner of United States Patent Number 5,355,964 ("964 Patent"). The '964 patent is directed at the use of vibratory pile driver/extractors. Generally, pile driving equipment is used in the construction industry, in order to drive large piles into the earth to form a stable support for buildings or other structures. It is also used to remove large piles from the earth.

On April 10, 2008, APE filed the instant action against defendant Bay for

infringement of the '964 patent; specifically, for Bay's alleged use, sale, lease and/or distribution of Hydraulic Power Systems, Inc.'s ("HPSI") Model 500, Model 250, and Early Model 500 vibratory pile driver/extractors ("Accused Devices"), all of which allegedly infringe the '964 patent. See generally First Amended Complaint.

A. The Claims at Issue

The '964 patent was issued on October 18, 1994, to John White ("White"), president of APE. The invention claimed therein relates specifically to pile driving and pile pulling (or extracting) equipment, and more particularly to vibratory pile driving and pile extracting equipment using counterweights.

The '964 patent contains twenty-seven claims. APE maintains that Bay has directly infringed claims 1-3, 5-14 and 16-18 of the '964 patent. See Pl. MSJ Mot. at 4:11-13. Of these allegedly infringed claims, four are independent claims that are at the heart of the parties arguments. The relevant language of these claims is as follows:<sup>1</sup>

**Claim 1:** "A vibratory assembly for imparting a vibratory force to a pile, comprising: a housing having at least one counterweight receiving means; a counterweight ... having a cylindrical gear portion and an eccentric weight portion integral with said cylindrical gear portion, said eccentric weight portion having at least one insert-receiving area formed therein, said counterweight being made of a first metal; a solid insert member securely positioned in one of said at least one insert-receiving areas said solid insert member being made of a second metal.... and at least one driving means operatively connected to said counterweight..."

**Claim 6:** "A vibratory assembly for imparting a vibratory force to a pile, comprising: a housing having first and second counterweight receiving means; a first counterweight ... having a cylindrical gear portion and an eccentric weight portion integral with said cylindrical gear portion, said eccentric weight portion having at least one insert-receiving area formed therein, said counterweight being made of a first metal; a second counterweight ... having a cylindrical gear portion and an eccentric weight portion integral with said cylindrical gear portion, said eccentric weight portion having at least one insert-receiving area formed therein, said counterweight being made of said first metal; a first solid insert member securely positioned in one of said at least one insert-receiving area of said first counterweight, said first solid insert member being made of a second metal....; a second solid insert member securely positioned in one of said at least one insert-receiving area of said second counterweight, said

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<sup>1</sup> Since the dependent claims necessarily depend upon the independent claims, and for ease of reference, only the independent claims at issue are expressly quoted herein.

second solid insert member being made of a second metal...and at least one driving means operatively connected to said first and second counterweights...”

**Claim 11:** “A vibratory assembly for imparting a vibratory force to a pile, comprising: a housing having an even number of counterweight receiving means; an even number of counterweights ... each of said counterweights having a cylindrical gear portion and an eccentric weight portion integral with said cylindrical gear portion, said eccentric weight portion having at least one insert-receiving area formed therein, said counterweights being made of a first metal; a plurality of solid insert members, at least one of said solid insert members securely positioned in said at least one insert-receiving areas of said counterweights respectively, each of said solid insert members being made of a second metal.... and at least one driving means operatively connected to said counterweights...”

**Claim 16:** “A counterweight assembly for use in a vibratory pile driver and/or pile puller, comprising: a cylindrical gear portion having a plurality of gear teeth around its circumference, said cylindrical gear portion being made of a first metal; an eccentric weight portion connected to said cylindrical gear portion at a position radially outward of the axis of said cylindrical gear portion, said eccentric weight portion having at least one insert-receiving area therein, said eccentric weight portion being made of said first metal; and at least one solid insert member... securely positioned in said at least one insert-receiving area respectively, said at least one solid insert member being made of a second metal...”

See Declaration of Kenneth P. Kula ISO Bay Machinery’s MSJ (“Kula Decl.”), Ex. A (“‘964 Patent”), at 9:33-53; 9:65-10:31; 10:43-66; 11:8-25.

#### B. The Instant Motions

The court construed the relevant disputed claim terms on June 12, 2009. See generally Order Construing Claims (“Claim Construction Order”). The parties have now filed cross-motions for summary judgment on the issues of infringement and invalidity. Specifically, plaintiff moves for summary judgment as to infringement of all asserted claims, while defendant moves for summary judgment as to non-infringement, as well as for a judgment that the invention covered by the asserted claims was obvious under the prior art, thereby rendering the claims invalid.

### DISCUSSION

#### A. Legal Standard

Summary judgment is appropriate when the evidence shows there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Fed.

1 R. Civ. P. 56(c); Anderson v. Liberty Lobby, Inc., 477 U.S. 242 (1986).

2  
3 B. Analysis

4 The parties' cross-motions for summary judgment raise two overriding issues for the  
5 court's resolution: (1) whether the undisputed facts demonstrate defendant's infringement  
6 of the asserted claims by the Accused Devices; and (2) whether the undisputed facts  
7 demonstrate the obviousness of the claimed invention in light of the prior art. Both parties  
8 seek opposing judgments as to the former issue, while defendant alone seeks summary  
9 judgment as to the latter.

10 Preliminarily, the court notes that the parties do not dispute the design and/or  
11 construction of the three Accused Devices at issue – i.e., the Early Model 500, the Model  
12 500, and the Model 250. Plaintiff – as does defendant – relies in particular on the “series of  
13 declarations” filed by Zimmerman, HPSI's Vice President of Engineering, for a description  
14 of the Accused Devices at issue. See, e.g., Madson Declaration ISO Opp. Def. MSJ  
15 (“Madson Opp. Decl.”), Exs. A, B, L (setting forth Zimmerman's original declaration filed on  
16 August 8, as well as subsequent declarations filed October 15, and October 28, 2009). The  
17 parties further do not dispute that, while the Early Model 500 was distinct, the Model 500  
18 and Model 250 Devices are essentially identical in design, except for the fact that the Model  
19 500 houses four eccentric weight assemblies, and the Model 250 houses two eccentric  
20 weight assemblies. The Early Model 500 device is depicted in Figure 2 to the original and  
21 revised Zimmerman declarations, and the Model 250 and 500 devices are depicted in  
22 Figure 3 to those same declarations. See Madson Opp. Decl., Exs. A, L.

23 In sum, the Zimmerman declarations, and the '964 patent itself, disclose the  
24 undisputed design elements of both the patented device, and the Accused Devices.

25 The court now turns to the merits of the parties' arguments.

26 1. Infringement

27 Neither party disputes that the only relevant claims that need be considered are  
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claims 1, 6, 11, and 16, since the remaining claims at issue depend from these four. Accordingly, the issue before the court is whether summary judgment should be granted as to infringement or non-infringement of claims 1, 6, 11, and 16.

a. legal standards

The court engages in a two-step process in evaluating infringement. First, the court determines the scope and meaning of the claims via claim construction; then, the court compares that construction of the patent against the accused products. See, e.g., Business Objects, S.A. v. Microstrategy, Inc., 398 F.3d 1366, 1371 (Fed. Cir. 2004) (citations omitted). While claim construction is a matter of law, infringement itself is a question of fact. See, e.g., Frank's Casing Crew and Rental Tools, Inc. v. Weatherford International, Inc., 389 F.3d 1370, 1376 (Fed. Cir. 2004) (citations omitted). Therefore, a plaintiff is only entitled to summary judgment on the question of infringement "if the facts and inferences, when viewed in the light most favorable to [defendant], would not persuade a reasonable jury to return a verdict in favor of . . . the non-moving party." Business Objects, 398 F.3d at 1371.

Infringement may be proven by literal infringement. A claim is "literally infringed" if each properly construed claim element directly reads on the accused product or process. See Jeneric/Pentron Inc. v. Dillon Co., 205 F.3d 1377, 1382 (Fed. Cir. 2000). A claim may also be infringed through the doctrine of equivalents. Equivalence is a question of fact, and it is determined as of the time the infringement takes place. See generally Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17 (1997); Graver Tank & Mfg. Co. v. Linde Air Prod. Co., 339 U.S. 605 (1950). The test for whether an element in the alleged infringer's product or process is equivalent to a claimed element is whether the differences between the two are insubstantial to one of ordinary skill in the art. KJC Corp. v. Kinetic Concepts, 223 F.3d 1351, 1359 (Fed. Cir. 2000).

b. infringement of claims 1, 6, and 11

Claims 1, 6, and 11 are similar to each other, in that they require the same claimed

“counterweight.” The claims merely vary in terms of the *number* of claimed counterweights required. Claim 1, for example, requires “a counterweight” (i.e., at least one counterweight), whereas claim 6 requires “at least two counterweights” and claim 11 requires an “even number of counterweights.” See generally ‘964 Patent. As these distinctions are the only salient differences between the claims, the court considers all claims – and substantive infringement arguments thereon – together.<sup>2</sup>

APE contends that defendants’ Accused Devices infringe each independent claim because the devices contain counterweights that are identical – both literally and via the doctrine of equivalents – to the counterweight disclosed by the ‘964 patent. Defendant argues that no infringement is possible, however, because the Accused Devices lack the following critical elements that are required by the claims: (1) the Accused Devices do not contain, as part of the counterweight, “an eccentric weight portion integral with said cylindrical gear portion;” and (2) the Accused Devices do not include an “eccentric weight portion” that “[has] at least one insert-receiving area formed therein.”

Turning to the first of these elements, the court’s focus is on the following requirement included in all three independent claims: that the claimed counterweight “[have] a cylindrical gear portion and an eccentric weight portion integral with said cylindrical gear portion...”. See, e.g., ‘964 Patent at 9:37-41. The court construed the “eccentric weight portion” of the counterweight to mean “the bottom portion of the counterweight, which extends forward from the front face of the gear portion, containing more weight than the top portion due to its larger mass, including at least one insert-receiving area therein adapted to receive at least one solid tungsten rod.” See Claim Construction Order at 8-10. The court also construed “integral” to mean “formed or cast of one-piece.” Id. at 10-13. Finally, the court also construed “cylindrical gear portion” to

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<sup>2</sup> The remaining independent claim at issue, claim 16, also requires a “counterweight assembly;” however, the description of the counterweight assembly is somewhat different from the claims otherwise described herein, and lacks certain key phrases. Thus, the parties have treated this claim differently from the rest in their arguments, and the court does the same, as indicated below.

mean: “the ‘gear portion’ of the counterweight is a substantially cylindrical portion and has a rear face, a front face, and a plurality of gear teeth around its perimeter.” Id. at 7-8.

Reading the court’s construction together with the language of the claims, the counterweight claimed by the ‘964 patent must include both a gear portion and an eccentric weight portion that protrudes out of the gear portion, and the two must furthermore be formed of one-piece. This interpretation is consistent with the figures depicted in the ‘964 patent. Figures 3A and 3B, for example, depict a gear portion that extends upward, and an eccentric weight portion that is part of the gear portion, but protrudes outward from the bottom half of the gear portion and has substantially more mass than the skinnier gear portion sticking out on top. See ‘964 Patent. Critically, as depicted in Figure 3B, the two portions appear to be cast of one piece, rather than being separate distinct elements.

Turning to the undisputed elements of the Accused Devices, it is immediately apparent that, as defendant notes, the devices do not contain a gear portion and eccentric weight portion that are “integral” – i.e., formed or cast in one-piece. See Madson Decl., Exs B, L; see also id., Figures 2 and 3. Rather, as the Zimmerman declarations demonstrate (and as Figures 2 and 3 of the Zimmerman declarations clearly depict), the gear portion and eccentric weight portion are “bolted together using two huck bolts.” Id. In other words, the gear portion and the eccentric weight portion are distinct entities that are connected together with bolts. By contrast, the claims, as construed by the court and as depicted in the Figures illustrated by the ‘964 patent, disclose a counterweight in which the gear and eccentric weight portions are essentially melded together, forming a single piece – not connected together. Indeed, the court specifically considered the specification and prosecution history in concluding that “integral,” as used in the ‘964 patent, means that the counterweight’s gear and eccentric weight portions must basically be formed (or cast) of one metal. All of which compels the court to agree with defendant that the Accused Devices – all three of them – cannot infringe claims 1, 6, or 11 on grounds that the Accused Devices read upon the claims by virtue of satisfying the “integral” limitation of the claims.



1  
2 Plaintiff seeks to avoid this conclusion by arguing, in essence, that the Accused  
3 Devices contain an eccentric weight portion and a cylindrical gear portion that are *each*  
4 made of “one piece,” thereby satisfying the “integral” limitation. Specifically, and looking  
5 solely to the “gear” portion of each Accused Device – as set forth in Figures 2 and 3 of the  
6 Zimmerman Declarations – plaintiff contends that the cylindrical gear portion *itself* contains  
7 an “eccentric weight portion,” since it contains a ridge that defines a “raised feature” that  
8 extends forward from the gear itself, and since the bottom of the gear has fewer holes than  
9 the top of the gear, thereby increasing the mass at the bottom of the gear and making it  
10 eccentric. See Pl. Opp. MSJ Br. at 10:3-11:6. Since this cylindrical gear portion alone is  
11 self-contained and made of a single piece, therefore, plaintiff argues that the cylindrical  
12 gear portion contains an eccentric weight portion *and* a gear portion, both of which are  
13 made of one piece. This single cylindrical gear portion of the Accused Devices, concludes  
14 plaintiff, reads upon the claims at issue.

15 On balance, however, this argument strains credulity, and unduly contorts the plain  
16 meaning of the court’s claim construction. The argument’s critical failing is that it reads out  
17 of the court’s construction the entire portion of the counterweight which, as depicted and  
18 claimed in the ‘964 Patent itself and further depicted in Zimmerman’s illustrations of the  
19 Accused Devices, protrudes from the gear portion of the counterweight as a whole. See  
20 ‘964 Patent at Fig. 3A, 3B; Madson Decls., Exs. B, L at Figures 2-3. As the court expressly  
21 noted in its claim construction, each “counterweight” that is claimed by the ‘964 patent has  
22 a top portion and a bottom portion, and a gear portion, and an eccentric weight portion –  
23 with the bottom portion of the counterweight containing more weight than the top portion,  
24 as the bottom portion contains the ‘eccentric weight portion’ of the entire counterweight.  
25 See Claim Construction Order at 9:12-13; 10:1-5. As contemplated by the court, the  
26 eccentric weight portion and gear portion of the claimed counterweight are distinct  
27 elements of a single counterweight, which elements are in turn cast of one piece. Plaintiff,  
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1 however, seeks to ignore this separate ‘eccentric weight portion’ of the counterweight  
2 entirely, by claiming that the cylindrical gear portion *itself* may be read to include both a  
3 gear portion and an eccentric weight portion. In the court’s view, this argument defies logic,  
4 and would furthermore render the ‘964 patent’s “eccentric weight portion” limitation, as well  
5 as this court’s own express understanding of the patent claims, superfluous. Moreover, to  
6 the extent plaintiff’s argument rests on the claim that the cylindrical gear portion of the  
7 Accused Devices contains a ridge that defines a “raised feature” that extends forward from  
8 the gear itself, the court notes that this “raised feature” extends throughout the entirety of  
9 the circumference of the cylindrical gear portion itself, rather than simply the bottom portion  
10 of the gear – which furthermore renders superfluous that portion of the court’s claim  
11 construction order that specifically noted the claimed counterweight contemplates an  
12 eccentric portion that pertains to the bottom half of the counterweight only. Furthermore,  
13 the “raised feature” invoked by plaintiff also pertains only to the female gears encompassed  
14 by the Accused Devices and would not apply to the male gears at all – further casting doubt  
15 on the applicability of plaintiff’s argument.

16 Accordingly, the court rejects plaintiff’s arguments on this point, and agrees instead  
17 with defendant, that the Accused Devices – which contain a separate “gear” portion and a  
18 separate “eccentric” portion that are depicted in the Zimmerman declarations – cannot  
19 infringe because they do not include an “eccentric weight portion” that is “integral” with the  
20 cylindrical gear portion of the counterweight.<sup>3</sup>

21 Although the court need not consider defendant’s second argument – i.e., that the  
22 Accused Devices also fail to include an “eccentric weight portion” that “[has] at least one  
23 insert-receiving area” formed therein – in light of the foregoing holding, the court  
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25 <sup>3</sup> To the extent that plaintiff additionally argues that the Accused Devices contain  
26 a gear portion and eccentric weight portion that read upon the “integral” limitation under the  
27 doctrine of equivalents, see Pl. MSJ Br. at 9:17-10:5, the success of this argument, too,  
28 presupposes that the eccentric weight and cylindrical gear portions of the counterweight may  
be confined to the cylindrical gear portion of the counterweight alone. Thus, this argument fails  
for the same reasons just detailed.

1 nonetheless notes that this argument, too, is meritorious.

2 As noted previously, the court construed the “eccentric weight portion” of the  
3 counterweight to mean “the bottom portion of the counterweight, which extends forward  
4 from the front face of the gear portion, containing more weight than the top portion due to  
5 its larger mass, including at least one insert-receiving area therein adapted to receive at  
6 least one solid tungsten rod.” See Claim Construction Order at 8-10. The court also  
7 construed “insert-receiving area” to mean: “a bore formed in the eccentric weight portion of  
8 the counterweight, which extends fully through the gear portion and fully through the  
9 eccentric weight portion of the counterweight, capable of receiving a solid tungsten rod.”

10 The Accused Devices, as the undisputed illustrations contained in the Zimmerman  
11 Declarations show, do not literally read upon these limitations. Critically, the Accused  
12 Devices do not contain bores that extend fully through both the gear portion and eccentric  
13 weight portion of the counterweight. See Madson Decl., Exs. B and L at Figures 2 and 3.  
14 Rather, there are “blind holes” that are depicted, which pertain to the eccentric weight  
15 portion and to the gear portion of the counterweight separately and individually. Id. These  
16 blind holes – which are equivalent to bores – are different in number in each portion of the  
17 counterweight, as there are four blind holes in the eccentric portion of the counterweight  
18 depicted in Figure 2, and only three blind holes depicted in the gear portion. Id. In Figure  
19 3, there are three blind holes in the eccentric portion, and only one blind hole in the gear  
20 portion. Id. Significantly, these depictions demonstrate that, because the eccentric weight  
21 and cylindrical gear portions of the counterweight each contain different numbers of blind  
22 holes, the blind holes do not accordingly extend completely from one portion of the  
23 counterweight, all the way through the other portion. The illustration of the eccentric weight  
24 portion of the counterweight further proves this point, moreover, as the depiction of both the  
25 front and back faces of the eccentric weight portion of the counterweight expressly show  
26 that the holes therein do not extend all the way through the eccentric weight. Id.

27 Furthermore, to the extent that plaintiff once again asserts that the eccentric weight  
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1 portion of the counterweight is contained solely within the cylindrical gear portion of the  
2 Accused Devices and on that basis, supports a reading that the bore contained in the  
3 cylindrical gear portion extends fully through the gear portion and eccentric weight portion  
4 of the counterweight, the court once again rejects this presupposition as inconsistent with  
5 the claim language and the court's claim construction.

6 As such, the Accused Devices do not contain the claimed "insert-receiving area" in  
7 the eccentric weight portion of the counterweight, as required for literal infringement of the  
8 claims at issue.

9 Plaintiff also argues, alternatively, that the Accused Devices infringe the "insert  
10 receiving area" element of the claims at issue via the doctrine of equivalents. Although not  
11 entirely clear, plaintiff appears to argue – without significant explanation – that the blind  
12 holes in the Accused Devices function in a substantially similar fashion to the bores that  
13 extend fully through the eccentric weight and gear portions of the claimed invention. The  
14 court finds plaintiff's arguments on this front unpersuasive. To the extent plaintiff's  
15 arguments are premised on the now-familiar argument that the cylindrical gear portion  
16 alone should be considered, the argument is rejected. To the extent plaintiff argues that  
17 the doctrine of equivalents is satisfied when considering both the cylindrical gear and  
18 eccentric weight portions of the counterweight, as contemplated by the court in its claim  
19 construction order, plaintiff's arguments are so conclusory, and lack such detail, as to  
20 preclude judgment in its favor on this point. See, e.g., Pl. Reply Br. ISO MSJ at 15:9-19.

21 In sum, defendant is also correct that the claimed "insert receiving area" of the '964  
22 patent – which must *fully* extend *through* the gear and eccentric weight portions of the  
23 counterweight – is not contained in the Accused Devices, whether literally or functionally.  
24 Plaintiff's contrary argument – which largely depends on the same presupposition raised  
25 above claiming that the "eccentric weight portion" is contained *solely* in the gear portion of  
26 the counterweight – is without merit.

27 Ultimately, therefore, the court concludes that the undisputed evidence regarding the  
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1 Accused Devices demonstrates that there is no materially disputed issue of fact as to  
2 infringement, as the same facts illustrate that the Accused Devices lack two critical  
3 limitations of the relevant claims: (1) the requirement that the claimed invention contain, as  
4 part of the counterweight, “an eccentric weight portion integral with said cylindrical gear  
5 portion;” and (2) the requirement that the claimed invention include an “eccentric weight  
6 portion” that “[has] at least one insert-receiving area formed therein.” Thus, defendant  
7 cannot be held to infringe claims 1, 6, and 11 or any dependent claims therefrom, on these  
8 bases.

9 c. infringement of claim 16

10 Claim 16 covers “an eccentric weight portion *connected to* said cylindrical gear  
11 portion” (emphasis added), and therefore differs from the foregoing claims in that it does  
12 not require the claimed eccentric weight portion be “integral” with the cylindrical gear  
13 portion of the counterweight. The court has construed “connected to” to mean: “joined  
14 together, united or linked.” See Claim Construction Order at 15-17.

15 As a preliminary matter, the same observations that lead to the conclusion that the  
16 Accused Devices do *not* contain counterweights that are “integral” – i.e., the Accused  
17 Devices contain eccentric weight portions and gear portions that are distinct, separate  
18 entities that are bolted together rather than cast of one piece – support the conclusion that  
19 the Accused Devices do, in fact, satisfy the “connected to” limitation of claim 16. After all,  
20 and as noted previously, the Accused Devices contain a cylindrical gear portion, and a  
21 separate eccentric weight portion, both of which are bolted to each other “via huck bolts.”  
22 See, e.g., Madson Decl., Ex. B at 3-4.

23 For that reason, perhaps, defendant focuses its non-infringement argument on  
24 estoppel arguments, rather than making strict infringement arguments. Specifically,  
25 defendant contends that APE is estopped from asserting that the Accused Devices *could*  
26 read on claim 16, because plaintiff specifically disclaimed in its patent specification any  
27 argument that a two-piece, bolted counterweight like defendant’s could be covered by claim  
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1 16. Defendant notes that, in the specification of the '964 patent, the patentee expressly  
2 distinguishes and criticizes the prior art by noting that it included a "vibratory assembly with  
3 counterweights having a solid eccentric weight bolted to a portion of a cylindrical gear,"  
4 which "bolted counterweights are not sufficiently durable, because the bolts have a very  
5 undesirable tendency to break under the large stress loads generated...". See '964 Patent  
6 at 1:39-51. The specification continues: "Another prior art vibratory assembly avoids this  
7 breaking problem by using a cast, one-piece, solid counterweight having an eccentric  
8 weight portion integral with a cylindrical gear portion" – which "integral" portion the patent  
9 went on to claim. According to defendant, this specification language operates as a clear  
10 disavowal of devices that include bolted counterweights.

11 The court, however, remains unpersuaded. While the language of the specification  
12 points to problems in the prior art, and furthermore criticizes the prior art before going on to  
13 include an "integral" portion in the invention that purportedly improves upon the prior art,  
14 the court agrees with plaintiff that this falls short of a clear disavowal of "bolted"  
15 counterweights in the specification. Cf. SciMed Life Sys., Inc. v. Advanced Cardiovascular  
16 Sys., Inc., 242 F.3d 1337, 1343-44 (Fed. Cir. 2001). Indeed, the inclusion of claim 16 itself,  
17 which expressly differs from claims 1, 6, and 11 via its inclusion of the "connected to"  
18 limitation (as opposed to the "integral" limitation), cuts against such an interpretation; else,  
19 there would be no sense in even including claim 16.

20 Notwithstanding defendant's failure to persuade the court as to non-infringement via  
21 application of the estoppel doctrine against plaintiff's arguments, the court nonetheless  
22 concludes that a finding of non-infringement as to claim 16 (and its dependent claims) is  
23 appropriate. Claim 16 requires, in addition to the "connected to" limitation, that the  
24 counterweight claimed therein contain an "eccentric weight portion having at least one  
25 insert-receiving area therein." See '964 Patent at 11:15-17. And in view of the court's  
26 foregoing discussion regarding the Accused Devices' failure to infringe the patent claims by  
27 virtue of the "insert-receiving area" limitation, the same reasoning that applied there,  
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1 applies here.

2 \* \* \*

3 In sum, as to non-infringement of independent claims 1, 6, 11, and 16 (and all  
4 dependent claims at issue), the court hereby GRANTS summary judgment in defendant's  
5 favor, and DENIES plaintiff's summary judgment motion as to infringement, for all the  
6 foregoing reasons.

7 2. Obviousness

8 Defendant also seeks a ruling that the '964 patent is invalid, on obviousness  
9 grounds, as a result of (1) the ACE counterweight disclosed as prior art in the patent  
10 specification; (2) Hornstein patent; and (3) the Toncelli patent. Defendant more specifically  
11 argues that the counterweight claimed by the '964 patent is obvious, in light of the  
12 combination of the Ace counterweight and Hornstein, or alternatively, in light of the  
13 combination of the Ace counterweight and Toncelli.

14 a. legal standards

15 The legal standards for invalidity based on anticipation and/or obviousness are well-  
16 established. In general, a patent is entitled to a presumption of validity, and an accused  
17 infringer must prove invalidity by clear and convincing evidence. See Metabolite Labs., Inc.  
18 v. Lab. Corp., 370 F.3d 1354, 1365 (Fed. Cir. 2004). Indeed, the burden of proof in all  
19 instances falls upon the party seeking to establish the invalidity of a patent claim, who  
20 "must overcome the presumption of validity in 35 U.S.C. § 282 by clear and convincing  
21 evidence." Nystrom v. Trex Co., 374 F.3d 1105, 1117 (Fed. Cir.2004) (quoting State  
22 Contracting & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1067 (Fed. Cir.2003)).

23 A patent is considered obvious if "the differences between it and the prior art "are  
24 such that the subject matter as a whole would have been obvious at the time the invention  
25 was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a). To determine  
26 obviousness, the court must "examine 1) the scope and the content of the prior art; 2) the  
27 level of ordinary skill in the art; 3) the differences between the claimed invention and the  
28

1 prior art; and 4) the objective evidence of nonobviousness.” Iron Grip Barbell Co., Inc. v.  
 2 USA Sports, Inc., 392 F.3d 1317, 1320 (Fed. Cir. 2004), citing Graham v. John Deere Co.,  
 3 383 U.S. 1, 17-18 (1966). Obviousness is a question of law based on underlying questions  
 4 of fact. Medical Instrumentation, 344 F.3d at 1220 (Fed. Cir. 2003) (citation omitted).

5 To prevail on a claim for obviousness, a defendant was ordinarily required to show  
 6 “a motivation or suggestion” to combine the separate elements of prior art cited, along with  
 7 “a reasonable expectation of success” in doing so. Boehringer Ingelheim Vetmedica, Inc.  
 8 v. Schering-Plough Corp., 320 F.3d 1339, 1354 (Fed. Cir. 2003). See also Teleflex, Inc. v.  
 9 Ficosa North Am. Corp., 299 F.3d 1313, 1334 (Fed. Cir. 2002) (“The showing of motivation  
 10 to combine must be clear and particular, and it must be supported by actual evidence.”). In  
 11 KSR Int’l Co. v. Teleflex, Inc., 127 S. Ct. 1727 (2007), the Supreme Court considered this  
 12 standard anew, however, and cautioned that the requirement for such a showing cannot be  
 13 transformed into a rigid rule that limits the obviousness inquiry. See id. at 1741 (“The  
 14 obviousness analysis cannot be confined by a formalistic conception of the words teaching,  
 15 suggestion, and motivation, or by overemphasis on the importance of published articles  
 16 and the explicit content of issued patents.”). As the Court said: “In determining whether the  
 17 subject matter of a patent claim is obvious, neither the particular motivation nor the avowed  
 18 purpose of the patentee controls. What matters is the objective reach of the claim.” Id. at  
 19 1741-42. With this in mind, the “predictable use of prior art elements according to their  
 20 established functions” is not patentable. Id. at 1740.

21 In further describing the manner of the obviousness analysis to be undertaken, the  
 22 KSR Court also made several observations that are pertinent here. It noted, for example,  
 23 that a patent composed of several elements is not proved obvious “merely by  
 24 demonstrating that each of its elements was, independently, known in the prior art.” See  
 25 id. at 1741. Rather, the question is really whether “a person of ordinary skill can implement  
 26 a predictable variation.” If so, then § 103 likely bars its patentability. For the same reason,  
 27 “if a technique has been used to improve one device, and a person of ordinary skill in the  
 28



1 art would recognize that it would improve similar devices in the same way, using the  
2 technique is obvious unless its actual application is beyond his or her skill.” Id. at 1740.  
3 Finally, the Court noted that it will often be necessary “for a court to look to interrelated  
4 teachings of multiple patents; the effects of demands known to the design community or  
5 present in the marketplace; and the background knowledge possessed by a person having  
6 ordinary skill in the art, all in order to determine whether there was an apparent reason to  
7 combine the known elements in the fashion claimed by the patent at issue.” Id. at 1740-41.

8 b. the prior art

9 Turning to the prior art, there are three references at issue before the court. The first  
10 is what the parties refer to as the Ace counterweight. This counterweight refers to the  
11 patentee/inventor’s own prior attempts to develop a new type of vibratory  
12 hammer/extractor. The efforts to develop a satisfactory counterweight prior to the ‘964  
13 patent are described in Col. 1, lines 52-Col. 2, line 9 of the ‘964 patent. Second, U.S.  
14 Patent No. 3,224,514 (the “Hornstein patent”) was issued in 1965, and describes a  
15 counterweight assembly that includes cavities for receiving solid weights made of “lead, or  
16 other heavy metal, such as tungsten or uranium alloys, or other heavy material...”. See  
17 Declaration of Kenneth Kula ISO Def. Motion for Summary Judgment (“Kula Decl.”), Ex. M.  
18 Finally, U.S. Patent No. 2,042,499 (the “Toncelli patent”) was issued in 1991, and describes  
19 a rotor having cavities adopted to receive solid pads or plugs made of “a material selected  
20 among lead, wolfram [tungsten] and their alloys.” See Kula Decl., Exs. O, P.

21 According to defendant, it is undisputed that the Ace counterweight constitutes prior  
22 art, and had the following characteristics: it was made with a hollow “eccentric portion and,  
23 to this hollow eccentric portion, one or more bores were made and filled with molten lead  
24 and allowed to cool;” the counterweight was included in a vibratory assembly for imparting  
25 a vibratory force to a pile; it was included in housing having at least one counterweight  
26 receiving means; it had a cylindrical gear portion; it had an eccentric weight portion; the  
27 eccentric weight portion was integral with the cylindrical gear portion; and the assembly  
28

1 included at least one driving means adapted to rotate the Ace counterweight about its  
2 rotational axis. See, e.g., uncontroverted facts at Def. MSJ Br. at 19:3-20:7. Thus,  
3 contends defendant, the only difference between the claimed counterweight and the Ace  
4 counterweight is that the Ace counterweight housed lead inserts, not tungsten inserts, and  
5 that this counterweight, combined with the Tungsten use/inserts disclosed in Hornstein and  
6 Toncelli, render the claimed counterweight of the '964 patent obvious. Defendant relies  
7 heavily on its depiction of the Ace counterweight (in Figures 5 and 6 of their motion  
8 papers), and its comparison with the '964 counterweight, in making this argument.

9 Plaintiff, for its part, does not dispute per se either the content or disclosures  
10 contained in the Hornstein or Toncelli patents. Rather, plaintiff focuses on the Ace  
11 counterweight, arguing that there are genuine issues of material fact regarding the actual  
12 configuration of the Ace counterweight. To that end, plaintiff introduces the supporting  
13 declaration of John White, the inventor and creator of the purported Ace counterweight.  
14 See generally Declaration of John L. White ISO Opp. Def. MSJ ("White Decl."). According  
15 to plaintiff, the depiction of the Ace counterweight as being nearly "identical" to the '964  
16 counterweight is wrong: the drawing used by defense counsel is counsel's own re-creation;  
17 the actual drawing relied on by defendant as a basis for counsel's drawing – as exhibited in  
18 document no. APE00865 – does not actually depict the true Ace counterweight that was  
19 developed, is not prior art at any rate, and so cannot be equated to the Ace counterweight;  
20 and the actual counterweight that was used by Ace (which plaintiff refers to as the Device  
21 with a Lead-Filled Hollow) did not actually utilize any lead inserts whatsoever, as it relied on  
22 a pouring of molten lead that is distinctly different from lead inserts. Based on all these  
23 differences, plaintiff contends that any analysis concluding that one of skill in the art would  
24 have been motivated to combine the Ace counterweight with Hornstein or Toncelli, is  
25 improper hindsight.

26 On balance, the court concludes that a material dispute of fact exists regarding the  
27 scope of what the Ace counterweight depicted and covered, which dispute of fact is  
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1 material to the question of obviousness, and therefore validity of the patent.

2 Defendant, for example, has submitted its statement of supposedly uncontroverted  
3 facts regarding the counterweight. See Def. Br. ISO MSJ at ¶. 19-20. At first blush, this list  
4 of purportedly undisputed facts would seem to go a long way toward meeting the various  
5 elements of the claimed patent here, with the exception of the Tungsten inserts – e.g., the  
6 use of an eccentric weight portion and cylindrical gear portion of the counterweight; the  
7 integral nature of the eccentric weight and cylindrical gear portions of the counterweight;  
8 the counterweight's use in a vibratory assembly, and the assembly's use of housing having  
9 at least one counterweight receiving means; and the inclusion in the assembly of at least  
10 one driving means to rotate the counterweight about its rotational axis. Id. Moreover,  
11 plaintiff actually appears to agree with many of defendant's undisputed facts, specifically  
12 disputing only whether the *drawing* of the Ace counterweight produced by defendant  
13 actually depicts the Ace counterweight. See Madson Decl., Ex. B.

14 However, on closer inspection of the White Declaration submitted by plaintiff, a  
15 material dispute emerges. White testifies that the device he conceived and implemented –  
16 i.e., the Device with a Lead-Filled Hollow – bore no resemblance to the drawing that  
17 defendant relies on as proof of the Ace counterweight. See White Decl., ¶¶ 5-9. White  
18 also avers that the drawing – and any elements it discloses – is *not* prior art, since it was  
19 never published or publicly disclosed prior to his declaration in this matter. Furthermore,  
20 since the counterweight that Ace developed – the Device with a Lead-Filled Hollow – was  
21 not representative of the drawing that defendant relies on, the actual counterweight that  
22 Ace developed never contained an eccentric weight, as depicted in the drawing. Id. at ¶ 7.  
23 Rather, all efforts to recreate the drawing, or to make an Ace counterweight that was  
24 similar to the drawing, ended in disaster, since molten lead could not be used to fill the  
25 bores in the counterweight without horrible results. See generally id. Plaintiff furthermore  
26 notes that in the White deposition, to which defendant only selectively cites in its opening  
27 brief, White also testified that the actual Ace counterweight that was depicted in the  
28

1 drawing relied on by defendant exhibits a “big difference” from the actual ‘964 patent  
2 design. See Madson Decl., Ex. K at 217-19.

3 On balance, therefore, White’s testimony casts doubt on (1) whether the drawing of  
4 the purported Ace counterweight upon which defendant relies for its argument is prior art,  
5 and can be used as proof of what the Ace counterweight disclosed; (2) whether the Ace  
6 counterweight actually disclosed “lead inserts” (as opposed to molten lead techniques); and  
7 (3) what, in fact, the true Ace counterweight that was *actually* developed disclosed. All of  
8 which is material to the question of how the prior art surrounding the Ace counterweight  
9 should be defined. Only once this is defined, can the court go on to consider it in light of  
10 Hornstein and Toncelli.

11 Defendant responded at the hearing on this matter that the issue of the actual  
12 difference between the Ace counterweight and the drawing as a basis for invalidity is  
13 immaterial. The court, however, is not persuaded that this is so. It appears to the court  
14 that the very nature of the parties’ dispute regarding the prior art and what it discloses, is  
15 not clear, let alone is it undisputed. This dispute – which in turn goes to the very question  
16 of obviousness – is therefore material.

17 Accordingly, defendant’s request for summary judgment as to invalidity should be  
18 DENIED.

19 C. Conclusion

20 For all the foregoing reasons, the court GRANTS defendant’s motion for summary  
21 judgment as to non-infringement of claims 1, 6, 11 and 16, and all dependent claims  
22 therefrom; DENIES plaintiff’s cross-motion for summary judgment as to infringement of the  
23 same claims; and DENIES defendant’s motion for summary judgment as to invalidity on  
24 obviousness grounds.

25 By separate order, the parties are referred for assignment to a magistrate judge for a  
26 mandatory settlement conference. Thereafter, and before commencement of pretrial  
27 preparation, the parties shall attend a case management conference to discuss whether trial  
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of this matter should go forward or should be stayed pending resolution of related litigation.

**IT IS SO ORDERED.**

Dated: February 25, 2010



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PHYLLIS J. HAMILTON  
United States District Judge